Core no. SU 81-18 N 37° 46.0' W 10° 11.0': 3135 m b.s.l.

Age control: Date: 1994

- *C. wuellerstorfi* and various other benthic and planktic $\delta^{18}O$ record (J.-C. Duplessy/L.D. Labeyrie, Gif-sur-Yvette, personal communication, 5.02.1990).
- AMS ^{14}C dating on *G. bulloides* from Bard et al. (1989). Additional ages from J.-C. Duplessy, Gif-sur-Yvette, personal communication, 5.02.1990).

Core fit :

- None

Surface sediment age :

- Zero, supported by young AMS ^{14}C ages on near surface sediments.

Age/depth correlation :

Orig. depth [cm]	^{14}C age (lab. no.) [ky BP]	Error ±	Calendar years [ka]		Sed.rate [cm/ky]	Original interval/ material/ $\delta^{18}O$ stratigraphy	Remarks
0			0				
12.5	1.04	190	1.00	a)	-.-	AMS ^{14}C dating	ignored, mixed layer
29.75	1.41	80	1.36	a)	21.9	AMS ^{14}C dating	
49.75	3.05	100	3.28	a)	10.4	AMS ^{14}C dating	
69.5	4.54	240	5.22	b)	10.2	AMS ^{14}C dating	
89.75	5.24	140	6.04	b)	24.7	AMS ^{14}C dating	
111	6.79	140	7.64	c)	13.3	AMS ^{14}C dating	
129.5	7.59	120	8.37	c)	25.3	AMS ^{14}C dating	
141	8.76	130	9.60	c)	9.3	AMS ^{14}C dating	
149.5	9.36	130	10.06	d)	18.5	AMS ^{14}C dating	
169.5	10.39	130	12.39	d)	-.-	AMS ^{14}C dating	ignored, outlier
180	10.28	140	12.28	d)	13.7	AMS ^{14}C dating	
189.5	10.68	140	12.68	d)	23.7	AMS ^{14}C dating	
200	11.01	170	13.01	d)	31.8	AMS ^{14}C dating	
208.5	11.76	200	13.76	d)	11.3	AMS ^{14}C dating	
229.5	12.26	170	14.26	d)	42	AMS ^{14}C dating	
249.5	12.46	150	14.46	d)	100	AMS ^{14}C dating	
260	12.70	170	14.70	d)	43.7	AMS ^{14}C dating	
280	13.58	190	17.08	d)	8.4	AMS ^{14}C dating	
299	13.95	180	17.45	d)	51.4	AMS ^{14}C dating	
310	14.49	230	17.99	d)	-.-	AMS ^{14}C dating	ignored e)
320	13.94	170	17.44	d)	-.-	AMS ^{14}C dating	ignored, age reversal, e)
329.5	14.59	190	18.09	d)	47.7	AMS ^{14}C dating	
360	15.23		18.73	d)	47.7	AMS ^{14}C dating	
400	17.11		20.61	d)	-.-	AMS ^{14}C dating	ignored, age reversal
441	16.19		19.69	d)	84.4	AMS ^{14}C dating	
521	20.85		24.35	d)	-.-	AMS ^{14}C dating	ignored, age reversal
551	19.33		22.87	d)	34.6	AMS ^{14}C dating	
631	22.85		26.35	d)	-.-	AMS ^{14}C dating	ignored, e)
691	21.88		25.38	d)	55.3	AMS ^{14}C dating	

a) corrected after Stuiver & Becker (1986).
b) corrected after Pearson et al. (1986).
c) corrected after Kromer et al. (1986).
d) corrected after Bard et al. (1990).
e) Higher ^{14}C ages ignored as biased by advection of fossil grains.

Remarks:

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Original references:

- Sarnthein, M., Winn, K., Jung, S.J.A., Duplessy, J.-C., Labeyrie, L., Erlenkeuser, H. & Ganssen, G. (1994): Changes in east Atlantic deepwater circulation over the last 30,000 years: Eight time slice reconstructions.- Paleoceanography, 9, 209-267.
- Bard, E., Fairbanks, R., Arnold, M., Maurice, P., Duprat, J., Moyes, J. & Duplessy, J.-C. (1989): Sea level estimates during the last deglaciation based on $\delta^{18}O$ and accelerator mass spectrometry ^{14}C ages measured on *Globigerina bulloides*.- Quat. Res., 31, 309-317.

LGM time slice:

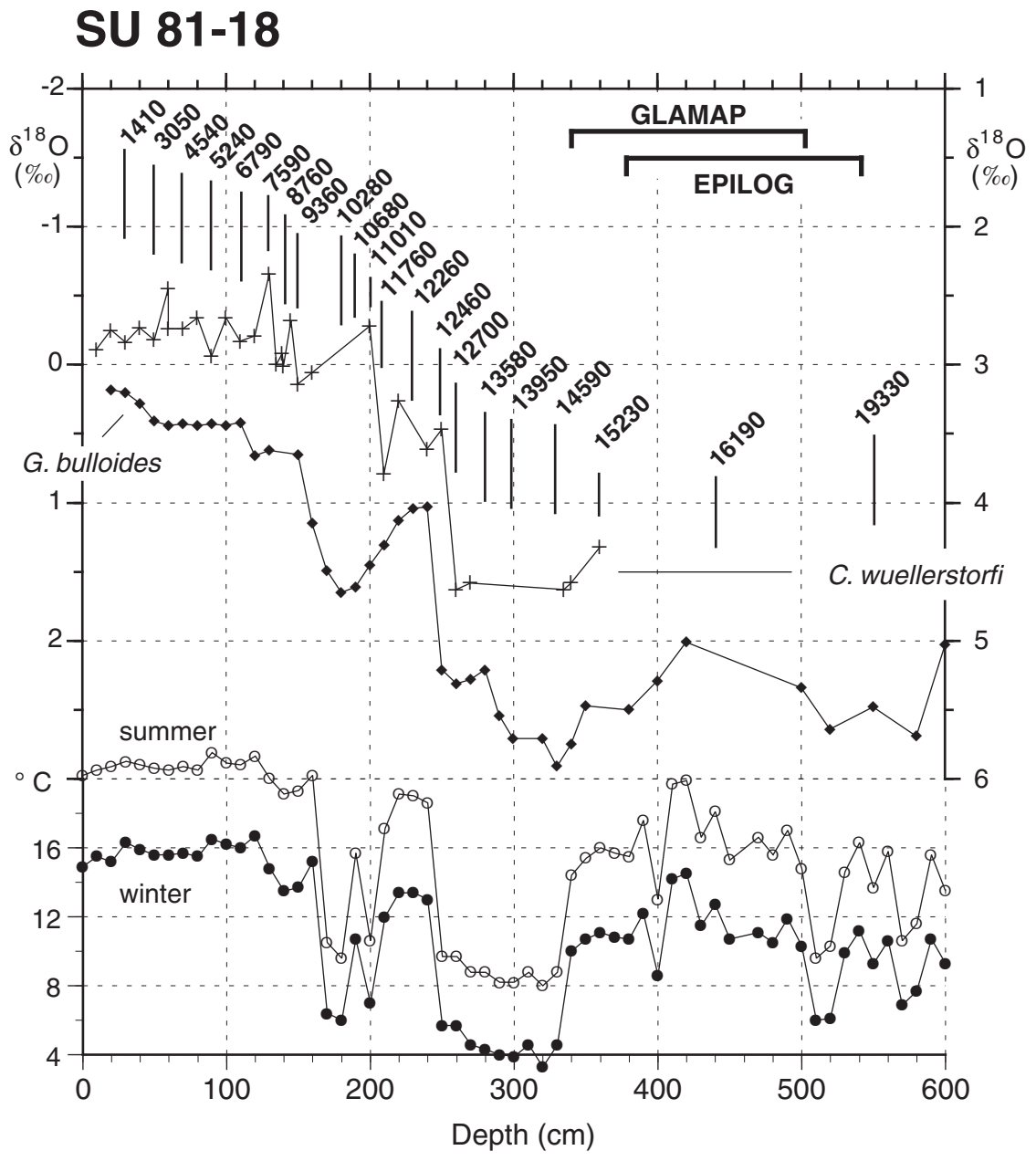
- GLAMAP: 340-503 cm orig. depth
- EPILOG: 379-538 cm orig. depth

LGM foraminifera counts: Duprat (JD)

- GLAMAP: 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 470, 480, 490, 500 cm orig. depth
- EPILOG: 380, 390, 400, 410, 420, 430, 440, 450 470, 480, 490, 500, 510, 520, 530 cm orig. depth

References for faunal analysis:

- Cortijo, E. (1995): La variabilité climatique rapide dans l'Atlantique Nord depuis 128 000 ans: relations entre les calottes de glace et l'océan de surface. - Ph.D. thesis, Univ. de Paris-Sud, UFR Scientifique d'Orsay, Paris, 235 pp.
- Duplessy, J.-C., Labeyrie, L., Arnold, M., Paterne, M., Duprat, J., van Weering, T.C.E. (1992): Changes of surface salinity of the North Atlantic ocean during the last deglaciation.- Nature, 358, 485-488.


SU 81-18
δ18O (‰)
δ18O (‰)
GLAMAP
EPILOG
1410
3050
4540
5240
6790
7590
8760
9360
10280
10680
11010
11760
12260
12460
12700
13580
13950
14590
15230
16190
19330
G. bulloides
C. wuellerstorfi
summer
winter
° C
Depth (cm)